

## B.E.Aeronautical Engineering (Full Time) R2008

### Semester I

S.NO	COURSE CODE	COURSE TITLE	L	T	P	C
Theory						
1	HS 9111	Technical English– I	3	1	0	4
2	MA 9111	Mathematics – I	3	1	0	4
3	PH 9111	Engineering Physics	3	0	0	3
4	CY 9111	Engineering Chemistry	3	0	0	3
5	GE 9111	Engineering Graphics	2	0	3	4
6	GE 9112	Fundamentals of Computing	3	0	0	3
Practical						
7	PH 9112	Physics Laboratory	0	0	2	1
8	CY 9112	Chemistry Laboratory	0	0	2	1
9	GE 9113	Engineering Practices Laboratory	0	0	3	2
10	GE 9114	Computer Practices Laboratory	0	0	3	2
Total			17	2	13	27

### Semester II

S.NO	COURSE CODE	COURSE TITLE	L	T	P	C
Theory						
1	HS 9161	Technical English– II	2	0	2	3
2	MA 9161	Mathematics – II	3	1	0	4
3	PH 9164	Physics of Materials	3	0	0	3
4	GE 9261	Environmental Science and Engineering	3	0	0	3
5	GE 9151	Engineering Mechanics	3	1	0	4
6	EI 9161	Electrical Engineering	3	0	0	3
7	PR 9161	Production Process	3	0	0	3
Practical						
8	PR 9152	Production Process Laboratory	0	0	3	2
9	GE 9161	UNIX Programming Laboratory	0	0	4	2
Total			20	2	8	27

**Semester III**

S.NO	COURSE CODE	COURSE TITLE	L	T	P	C
Theory						
1	MA 9211	Mathematics – III	3	1	0	4
2	AE 9201	Engineering Fluid Mechanics	3	1	0	4
3	AU 9201	Thermodynamics and Thermal Engineering	3	1	0	4
4	AU 9202	Solid Mechanics	3	1	0	4
5	EI 9211	Electronics & Instrumentation	3	0	0	3
6	AE 9202	Element of Aeronautics	2	0	0	2
Practical						
7	PR 9202	Computer Aided Part and Assembly Drawing	0	0	3	2
8	PR 9203	Mechanical Sciences Laboratory	0	0	3	2
Total			17	4	6	25

**Semester IV**

S.NO	COURSE CODE	COURSE TITLE	L	T	P	C
Theory						
1	MA 9262	Numerical Methods	3	1	0	4
2	PR 9251	Theory of Machines	3	1	0	4
3	AE 9251	Aircraft Structures – I	3	1	0	4
4	AE 9252	Aerodynamics – I	3	1	0	4
5	AE 9253	Propulsion – I	3	1	0	4
6	AE 9254	Aircraft Systems and Instruments	3	0	0	3
Practical						
7	AE 9255	Aircraft Structures Laboratory – I	0	0	3	2
8	AE 9256	Aerodynamics Laboratory – I	0	0	3	2
9	EI 9261	Electrical & Electronics Engineering Laboratory	0	0	3	2
Total			18	5	9	29

**Semester V**

S.NO	COURSE CODE	COURSE TITLE	L	T	P	C
Theory						
1	AE 9301	Aircraft Structures – II	3	0	0	3
2	AE9302	Aerodynamics – II	3	0	0	3
3	AE 9303	Propulsion – II	3	0	0	3
4	AE 9304	Aircraft Performance	3	0	0	3
5	AE 9305	Theory of Elasticity	3	0	0	3
6	AE 9306	Experimental Stress Analysis	3	0	0	3
7	AE 9307	Control Engineering	3	0	0	3
Practical						
8	AE 9308	Aircraft Structures Laboratory – II	0	0	3	2
9	AE 9309	Aerodynamics Laboratory – II	0	0	3	2
10	AE 9310	Technical Seminar	0	0	2	1
Total			21	0	8	26

**Semester VI**

S.NO	COURSE CODE	COURSE TITLE	L	T	P	C
Theory						
1	AE 9351	Aircraft Stability and Control	3	1	0	4
2	AE9352	Numerical Methods in Fluid Dynamics	3	0	0	3
3	AE 9353	Composite Materials and Structures	3	0	0	3
4	AE 9354	Finite Element Method	3	0	0	3
5	AE 9355	Theory of Vibrations	3	0	0	3
6		Elective - I	3	0	0	3
Practical						
7	AE 9356	Aircraft Design Project – I	0	0	4	2
8	AE 9357	Propulsion Lab	0	0	3	2
9	AE 9358	CAD Laboratory	0	0	3	2
10	GE 9371	Communication Skills and Soft Skills Laboratory	0	0	2	1
Total			18	1	12	26

**Semester VII**

S.NO	COURSE CODE	COURSE TITLE	L	T	P	C
Theory						
1	PR 9402	Engineering Management	3	0	0	3
2	AE 9401	Computational Fluid Dynamics	3	0	0	3
3	AE 9402	Heat Transfer	3	0	0	3
4		Elective – II	3	0	0	3
5		Elective – III	3	0	0	3
6		Elective - IV	3	0	0	3
Practical						
7	AE 9403	Aircraft Design Project – II	0	0	4	2
8	AE 9404	Comprehension and Technical Seminar	0	0	2	1
Total			18	0	6	21

**Semester VIII**

S.NO	COURSE CODE	COURSE TITLE	L	T	P	C
Theory						
1		Elective - V	3	0	0	3
Practical						
2	AE 9451	Project Work	0	0	12	6
3	AE 9452	Flight Training	0	0	0	1
Total			3	0	12	10

**TOTAL CRESIT = 190**

### LIST OF ELECTIVES

S.NO	COURSE CODE	COURSE TITLE	L	T	P	C
1	AE 9021	Space Mechanics	3	0	0	3
2	AE 9022	Helicopter Aerodynamics	3	0	0	3
3	AE 9023	Boundary Layer Theory	3	0	0	3
4	AE 9024	Combustion	3	0	0	3
5	AE 9025	Aeroelasticity	3	0	0	3
6	AE 9026	Theory of Plates and Shells	3	0	0	3
7	AE 9027	Avionics	3	0	0	3
8	AE 9028	Structural Dynamics	3	0	0	3
9	AE 9029	Hypersonic Aerodynamics	3	0	0	3
10	AE 9030	Fatigue and Fracture Mechanics	3	0	0	3
11	AE 9031	Satellite Technology	3	0	0	3
12	AE 9032	Wind Tunnel Techniques	3	0	0	3
13	AE 9033	Approximate Methods in Structural Mechanics	3	0	0	3
14	AE 9034	Industrial Aerodynamics	3	0	0	3
15	AE 9035	Rockets and Missiles	3	0	0	3
16	AE 9036	Experimental Fluid Dynamics	3	0	0	3
17	AE 9037	Airframe Repair and Maintenance	3	0	0	3
18	AE 9038	Aircraft rules & Regulations – CAR I and II	3	0	0	3
19	AE 9039	Aero Engine Repair and Maintenance	3	0	0	3
20	GE9021	Professional Ethics in Engineering	3	0	0	3
21	GE 9022	Total Quality Management	3	0	0	3
22	GE 9023	Fundamentals of Nanoscience	3	0	0	3